WHS 04-19

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Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW
Nassif Building, Room PL-401
Washington, DC 20590-0001

Subject: **Docket No. FAA-2004-17681, Aging Airplane Program Update: New Approach for Requirements for Design Approval Holders**

The Aerospace Industries Association (AIA) and General Aviation Manufacturers Association (GAMA) appreciates the opportunity to provide comments on the general Aging Aircraft Program update which was published within the Fuel Tank Safety Compliance Extension final rule in the July 30, 2004 Federal Register. Although this was "provided mainly for informational purposes," one of the proposed changes represents a significant shift in FAA's philosophy as to regulatory responsibility of manufacturers and operators for continued airworthiness and the construct of the Federal Aviation Regulations. AIA and GAMA offer the following comments on the general Aging Airplane Program update and FAA's proposal for a "new approach for requirements for design approval holders."

SUMMARY

AIA and GAMA support the results of FAA's review of the Aging Airplane Program and its efforts to improve continued airworthiness by facilitating compliance with operational rules. However, industry does not have a clear enough understanding of the problem that FAA is attempting to address in the new approach for requirements for design approval holders. This proposal represents a significant shift in FAA's philosophy regarding certificate holder responsibilities for continued airworthiness and a significant change in regulatory structure of the Federal Aviation Regulations. The following provides general comments regarding the basic philosophy of the new approach for requirements for design approval holders and specific comments on considerations that should be made before implementing any new requirements.

REVIEW OF AGING AIRPLANE PROGRAM

AIA and GAMA applaud FAA's efforts to align the Aging Airplane Program rulemaking initiatives to ensure that: there are no overlapping or redundant requirements, the maintenance requirements allow operators to be more efficient in revising their maintenance programs when addressing similar initiatives, and that data supporting operator compliance is available. The

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preamble discusses the general background supporting the need for this review and the general findings related to each of the Aging Airplane Program rulemaking projects. Based on this comprehensive review, FAA has concluded that:

> *(1) We need to realign certain compliance dates in the existing rules and pending proposals to be more consistent; and*
>
> *(2) We need to make certain substantive changes to the focus and direction of some of the individual rulemaking projects to ensure that these projects work together.*

AIA and GAMA strongly support the results of FAA's review of the Aging Airplane Program and would support changes to each rulemaking project necessary to address its findings and conclusions. We understand that all the details about the FAA's proposed approach to the Aging Airplane Program are not fully developed and appreciate the opportunity to comment on the general rulemaking plan for the Aging Airplane Program Update. However, the results of the Aging Airplane Program review do not support FAA's proposed new approach for requirements for design approval holders.

NEW APPROACH FOR REQUIREMENTS FOR DESIGN APPROVAL HOLDERS

FAA proposes a new approach for requirements for design approval holders whereby "*for future operational rules where operators must rely on data or documents from design approval holders, we will mandate that the design approval holders' data or documents be developed by a specified date.*"

AIA and GAMA strongly support FAA's efforts to improve continued airworthiness by facilitating compliance with operational rules. Manufacturer's have a vital interest in providing the customer support necessary to ensure the continued airworthiness of their aircraft for both safety and commercial business reasons. Although there is always opportunity for improvement, the relationship between manufacturers and operators to support the continued airworthiness of aircraft is clearly effective as demonstrated by the U.S. aviation safety record. In addition, (as discussed above) FAA's comprehensive review of the Aging Airplane Program did not conclude that the design data and documents necessary to support operators compliance with past or future continued airworthiness requirements have not been available. Nevertheless, FAA is proposing a new approach for requirements for design approval holders as a result of the Aging Airplane Program Update. The preamble sections on the fuel tank safety compliance extension and the aging airplane safety rule provide the only discussion regarding the need for this new approach

The Fuel Tank Safety compliance extension discusses why design approval holders and operators will have difficulty complying with the new requirements by the effective date. All of the reasons relate to a lack of design approval holder and operator understanding of the new requirements and FAA expectations for compliance. FAA states that it will clarify SFAR 88 requirements and provide design approval holders with necessary information for determining what maintenance and inspection tasks are required as well as issue guidance to help ensure that design approval holders are fully aware of what is necessary to show compliance. FAA's proposal for new requirements for design approval holders does not address any of the reasons discussed and, therefore, would not enhance continued airworthiness.

FAA stated that it is considering requiring design approval holders to develop damage tolerance programs that will support compliance with the Aging Airplane Safety Rule because of comments that sought direct participation by the design approval holders to develop the required programs. The necessary information is currently available commensurate to the type of airplane and complexity of developing such programs. For obvious reasons, it is cost prohibitive to develop programs for airplanes of a certain age and certification basis that do not include damage tolerance design. Likewise, there are financial and liability issues which must be addressed when developing a continuous airworthiness program to extend an airplane's certificated life limit. FAA acknowledges the adverse economic impact that this rule would have for certain airplanes and proposes to substantially reduce the burden on industry by limiting the applicability of the damage-tolerance requirements to airplanes type certificated with 30 or more passengers or a payload capacity of 7,500 lbs or more that are in 121/129 air carrier service. Furthermore, FAA proposes to task ARAC to establish guidelines for the development of damage tolerance programs that will support compliance with the rule. Considering the basis for the comments FAA received on the Aging Airplane Safety Rule and the proposed changes, AIA and GAMA do not believe that FAA's proposal for new requirements for design approval holders would enhance continued airworthiness.

AIA and GAMA do not believe that industry has a clear enough understanding of the problem that FAA is attempting to address through this proposal and, therefore, is not able to support this proposal nor provide constructive comments to that end.

SIGNIFICANT CHANGE IN REGULATORY RESPONSIBILITY AND STRUCTURE

FAA's proposed new approach for requirements for design approval holders represents a significant change in regulatory responsibility and structure. The preamble states that;

> *… for future operational rules where operators must rely on data or documents from design approval holders, we will mandate that the design approval holders' data or documents be developed by a specified date.*
>
> *… for future rulemaking actions related specifically to continued airworthiness, we decided that the requirements for the design approval holders will be included in a new subpart to part 25, rather than in an SFAR. This approach will locate all requirements for design approval holders related to the continued airworthiness of transport category airplanes together in one place.*

The proposed new approach for requirements for design approval holders represents a significant shift in FAA's philosophy as to regulatory responsibility of manufacturers and operators for continued airworthiness. This proposal will have a substantial effect on commercial business relationships between design approval holders, suppliers and operators and legal relationships for product liability. The proposed changes in regulatory responsibility and the resultant changes in commercial business practices will have a significant impact on how industry builds sells, operates and maintain aircraft in the future. FAA also proposes to change the applicability of Part 25 which represents a significant expansion in the number of persons (operators and all design approval holders) who must assume regulatory burden for continued airworthiness requirements as well as a shift in the definition of an approved design certification basis.

The proposal to modify the applicability of Part 25 to include continued airworthiness requirements for design approval holders is a significant shift in FAA's philosophy as to the structure of the Federal Aviation Regulations. Part 21 prescribes rules governing design approval holders whereas Parts 23, 25, 27, 29, 33, 35, etc prescribes airworthiness standards for the issue of a type certificate (and changes thereto). FAA's decision to change the applicability of Part 25 raises many questions regarding the type certificate holders responsibilities under Part 21. First, is the apparent conflict with 21.99 which clearly states the continued airworthiness safety requirements for design approval holders. Paragraph (a) requires the holder of a type certificate to make design changes necessary to correct an unsafe condition. Paragraph (b) makes it clear that where there are no unsafe conditions, the holder of the type design may choose to make changes that will contribute to the safety of the product. The proposed new approach would require design approval holders to make changes to their type design even when there are no unsafe conditions to correct.

The proposal to create a new subpart to Part 25 to locate continued airworthiness requirements for design approval holders is a significant shift in FAA's philosophy as to the certification basis of an aircraft. Part 25 airworthiness standards establish a static certification basis which provides a clear definition of the certificated product. The inclusion of continued airworthiness requirements as part of the certification basis means that the type design definition of a certified product may change over time. An "evolving" type design would introduce new challenges in production, airworthiness certification, export, and commercial business relationships.

These issues need to be carefully considered before implementing a significant change in regulatory structure and responsibility for continued airworthiness.

SPECIFIC COMMENTS ON NEW APPROACH FOR REQUIREMENTS FOR DESIGN APPROVAL HOLDERS

In addition to the general comments above, AIA and GAMA offer the following specific comments for FAA's consideration if the proposed new approach for requirements for design approval holders is to be further developed.

New continued airworthiness requirements should be imposed only when necessary to address an unsafe condition. The ATA Spec 111, Airworthiness Coordination Process or equivalent should be used on a case-by-case basis to ensure that FAA and affected operators and manufacturers work together to define the continued airworthiness issue to be addressed and identify all potential solutions before imposing new regulatory requirements.

New continued airworthiness requirements for design approval holders should be promulgated on a case-by-case basis. It would not be appropriate to add a general provision to the regulations which would automatically require design approval holders to develop related continued airworthiness data whenever a new operating requirement is issued. Each new continued airworthiness requirement imposed upon operators and/or design approval holders should be issued as a proposed rule to ensure the appropriate due process and regulatory assessment necessary to determine the adequacy and appropriateness of the rule. Both the operator and design approval holder must be considered independently in the cost/benefit analysis of the newly proposed continued airworthiness requirement.

New continued airworthiness requirements for design approval holders should only be proposed when the design approval holder is the sole source of data necessary to comply with the requirement. As has been the case to date, the data necessary to support compliance with continued airworthiness programs has always been available from operators, manufacturers and third party providers. Commercial business relations and the open market ensure that the necessary continued airworthiness data are made available by those who are most capable of developing such programs in a timely and efficient manner. It may be appropriate to consider new continued airworthiness requirements for design approval holders in rare situation where they are the sole source of data necessary to comply with the requirement.

New continued airworthiness requirements for design approval holders should be limited only to those products that are directly affected by the associated operating rule. Nearly all continued airworthiness operating requirements have limited applicability. Any new requirement for design approval holders should also have limited applicability. For example, the Aging Airplane Safety rule will be limited only to those airplanes with 30 or more passenger seats in part 121 air carrier service. Therefore, any new requirements for design approval holders should be limited to the very same airplanes. It would be completely inappropriate to impose this new requirement upon design approval holders of transport category airplanes with less than 30 seats (i.e. business aircraft, regional aircraft) or those airplanes operating exclusively in Parts 91, 125, or 135.

New continued airworthiness requirements for design approval holders to develop specific data/program should also require the affected operators to use their data/program. The data necessary to support compliance with new operating requirements for continued airworthiness is typically available from operators, manufacturers, and third parties. When FAA mandates that the design approval holder must develop continued airworthiness data/program, it should also mandate that the operator use this data. This is necessary to ensure that the cost burden imposed upon design approval holders properly results in the desired benefits for the design approval holder as well as the operator.

New continued airworthiness requirements for design approval holders should consider the unique challenges of small fleet sizes and legacy airplanes. It would be unacceptable for FAA to impose a perpetual continued airworthiness burden upon design approval holders of legacy airplanes. This would include airplanes that have not been in production for an extended period of time and those for which there are only a small number remaining in the active fleet. The inappropriate application of new continued airworthiness requirements for design approval holders of these airplanes would affect the useful life of an aircraft which is typically determined by market conditions. This would likely result in older airplanes remaining in service longer than market conditions would have supported and/or the surrender of design approvals for which there is no longer an acceptable market to justify the ongoing burden. Either one of these situations would have an overall negative impact on safety.

New continued airworthiness requirements for design approval holders should clearly define the form of data to be provided. The burden imposed on design approval holders is directly related to the form of data to be developed and provided to operators. A clear definition of a new continued airworthiness requirement for design approval holders is necessary to support the cost/benefit analysis and to support design approval holder and operator compliance.

New continued airworthiness requirements for design approval holders should also consider the following:

- Impact on small businesses who hold a majority of the STC, PMA, and TSOs
- The number of design approval holders for any one airplane
- Enforcement for each type of design approval holder (TC, STC, PMA, TSO, etc)
- Products for which there is no type certificate holder/design approval holder
- A new FAR part, or the continued use of Special Federal Aviation Regulations (SFAR)
- Harmonization with ICAO, EASA and TC airworthiness requirements

CONCLUSION

AIA and GAMA appreciate the opportunity to provide comments on the general Aging Aircraft Program update and the new approach for requirements for design approval holders. This proposal represents a significant shift in FAA's philosophy regarding certificate holder responsibilities for continued airworthiness and a significant change in regulatory structure of the Federal Aviation Regulations. AIA and GAMA do not believe that industry has a clear enough understanding of the problem that FAA is attempting to address through this proposal. Therefore, we recommend that FAA hold a public workshop to discuss the concept of a new approach for requirements for design approval holders with all interested parties to ensure that there is a common understanding of the problem to be addressed and consideration of all potential solutions before moving ahead with such a significant and fundamental change to exiting regulations.

Please feel free to contact us if there are any questions or comments.

Sincerely,

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